**To:** OBrien, Wendy[OBrien.Wendy@epa.gov]

From: Christner, Jan

**Sent:** Wed 8/12/2015 1:28:33 AM

Subject: RE: Stats Question

Ok. Almost done. Do you want a copy of the spreadsheets or should I just send them to Megan?

From: OBrien, Wendy [mailto:OBrien.Wendy@epa.gov]

Sent: Tuesday, August 11, 2015 7:28 PM

To: Christner, Jan

Subject: RE: Stats Question

No – I thought we might have too small of a data set. Just do avg, min, max.

Thanks!

Wendy O'Brien, DVM, PhD, DABT

Toxicologist, Ecosystems Protection and Remediation

**USEPA Region 8** 

1595 Wynkoop Street

Denver, CO 80202

Phone: 303.312.6712

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From: Christner, Jan [mailto:Jan.Christner@WestonSolutions.com]

Sent: Tuesday, August 11, 2015 7:27 PM

To: OBrien, Wendy

Subject: RE: Stats Question

ProUCL will calculate the UTL for some of the locations but it has warnings:

• Warning: A sample size of 'n' = 5 may not adequate enough to compute meaningful and reliable test statistics and estimates!

• It is suggested to collect at least 8 to 10 observations using these statistical methods!

• Warning: There are only 5 Values in this data

• Note: It should be noted that even though bootstrap methods may be performed on this data set, the resulting calculations may not be reliable enough to draw conclusions

Do you want me to do the UTLs anyway?

Jan

From: OBrien, Wendy [mailto:OBrien.Wendy@epa.gov]

Sent: Tuesday, August 11, 2015 6:21 PM

To: Christner, Jan

Subject: RE: Stats Question

Yes – please exclude April if it is high flow/runoff conditions.

Wendy O'Brien, DVM, PhD, DABT

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From: Christner, Jan [mailto:Jan.Christner@WestonSolutions.com]

Sent: Tuesday, August 11, 2015 5:41 PM

To: OBrien, Wendy

Subject: RE: Stats Question

Ask Dan about water in April also.

From: OBrien, Wendy [mailto:OBrien.Wendy@epa.gov]

Sent: Tuesday, August 11, 2015 5:09 PM

To: Christner, Jan

Subject: RE: Stats Question

Checking with Dan.... Don't let that hold you up on water eval. - thx

Wendy O'Brien, DVM, PhD, DABT

Toxicologist, Ecosystems Protection and Remediation

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From: Christner, Jan [mailto:Jan.Christner@WestonSolutions.com]

**Sent:** Tuesday, August 11, 2015 4:54 PM

To: OBrien, Wendy Subject: Stats Question

Do you only want non-peak data for sediment also?

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